



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

|  |             |                      |                              |                  |
|--|-------------|----------------------|------------------------------|------------------|
| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
| 10/602,905   | 06/24/2003  | James A. Hoff        | 1104-750/ RKE-075            | 2171             |
| 7590 02/14/2007<br>Woodard, Emhardt, Moriarty, McNett & Henry LLP<br>Bank One Center/Tower<br>Suite 3700<br>111 Monument Circle<br>Indianapolis, IN 46204-5137 |             |                      | EXAMINER<br>SMALLEY, JAMES N |                  |
|  |             |                      | ART UNIT                     | PAPER NUMBER     |
|  |             |                      | 3781                         |                  |
| SHORTENED STATUTORY PERIOD OF RESPONSE   |             | MAIL DATE            | DELIVERY MODE                |                  |
| 2 MONTHS   |             | 02/14/2007           | PAPER                        |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Application Number: 10/602,905  
Filing Date: June 24, 2003  
Appellant(s): HOFF, JAMES A.

**MAILED**

**FEB 14 2007**

**Group 3700**

---

James M. Durlacher  
For Appellant

**EXAMINER'S ANSWER**

Art Unit: 3781

This is in response to the Reply Brief filed 10 October 2006 appealing from the Office action mailed 30 November 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

With regards to section VII(A), Appellant proceeds on the presumption that the rejection of claims 1, 8 and 9 is incorrect and assumes the rejection is based on claims 1, 5 and 9. Examiner notes the rejection was properly made and pertains to claims 1, 8 and 9 as listed in the Final Action.

With regards to section VII(B), Examiner notes claim 18 should be removed because it was canceled. The rejection only pertains to claims 2-5 and 7.

With regards to section VII(D), Examiner notes claim 18 should be removed because it was canceled. The rejection only pertains to claims 13-17.

Art Unit: 3781

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

|           |                 |         |
|-----------|-----------------|---------|
| 4,105,135 | BRADSHAW et al. | 8-1978  |
| 4,124,140 | ZIEGLER et al.  | 11-1978 |
| 5,680,953 | BAUGHMAN        | 10-1997 |
| 5,971,189 | BAUGHMAN        | 10-1999 |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

- A. Claims 1 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradshaw et al. US 4,105,135 in reference to Baughman US 5,971,189.
- B. Claims 2-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. US 4,105,135.
- C. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baughman US 5,680,953.
- D. Claims 13-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Ziegler et al. US 4,124,140 in view of Bradshaw et al. US 4,105,135.

**(10) Response to Argument****A. (First Grounds)****Claim 1**

Regarding claim 1, Examiner notes Appellant disagrees that the closure cap of Bradshaw is not capable of being used in the intended manner. Examiner notes the preamble of the claim is drawn to "A closing plug for receipt by a threaded flange that is assembled into a drum end" (emphasis added). In other words, the claim is drawn to the plug. In order to anticipate the claim, a device must be capable of being used in the intended manner. It must recite the claimed structure, and must only be capable of performing in the claimed manner regarding structural limitations of the preamble which are not positively

Art Unit: 3781

claimed. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, the Appellant's assertion that selective placement of the closure plug of Bradshaw is hindsight is not valid. This analysis must be used in order to prove that the device is capable of being used in the intended manner. The only functional limitation of claim 1 is that the axially-protruding projections limit the threaded advancement of the plug into a drum flange by abutting against a drum end. However, the drum end is only claimed as an intended use limitation, as per the preamble of claim 1. Therefore, the flanges of Bradshaw must only be capable of abutting a drum end to prevent threaded advancement of a closure plug in order to properly anticipate the claim. Examiner notes the axial projections of Bradshaw are capable of performing in the intended manner, i.e. they are capable of stopping threaded advancement of a plug into a threaded outlet by virtue of their axial length. To clarify, take note of the role of the downturned flange (51) of Baughman in figure 4, and how this flange serves to stop threaded advancement of the closure plug in figure 7 of the same patent. It is the Examiner's position that the axial projections of Bradshaw - - given an appropriately-dimensioned drum opening with an annular flange about the threaded opening such as that of Baughman - - are capable of being used in the intended manner, that being they are capable of preventing threaded advancement of the plug into a drum opening by abutting against a drum flange of sufficient height about the threaded opening. This analysis does not require hindsight reasoning, as asserted by the Applicant. Instead, the simple premise is based on a showing that the axial projections are capable of stopping the threaded advancement of the plug, and thus the plug is capable of being used in the intended manner.

Appellant also argues that the "flange" of Baughman does not meet the definition of the term based upon Appellant's application. However, Examiner notes the Appellant's Specification lacks a clear and concise definition for the term "flange." Therefore, in consideration of the fact that the flange is part of the intended use of claim 1, and furthermore that the Specification fails to provide a clear and concise definition for the term "flange," Examiner has given the term the broadest reasonable interpretation.

Appellant's arguments that the drawing is not to scale, based on the Examiner's assertion that the two flanges are "similarly dimensioned" is also not relevant. Examiner clarifies that the axial projections of the Baughman and Bradshaw patents are "similarly dimensioned" in that they both extend a short axial distance from the peripheral edge of a horizontal flange, but are far short of the bottom of the closure plug. The point of this is to strengthen the argument that the plug of Bradshaw would properly function in the intended manner of stopping threaded advancement if applied to the port of Baughman. Examiner notes that the only thing required for successfully applying the closure plug of Bradshaw to a drum end is that the drum end also be threaded. In this case, because Baughman is also threaded, there is a great expectation of success.

Finally, Appellant's arguments that "there is nothing stated in either Bradshaw et al. or in Baughman which would suggest this hand picked combination of features and there is no direction or motivation set forth in Bradshaw et al. suggesting that the plug could be exported to a different closure system," as quoted from the Appeal Brief, page 10, last paragraph, is not relevant because the rejection is made under 35 U.S.C. 102(b) in reference to another patent, but not in a *prima facie* case of obviousness. Appellant's numerous citations on pages 11-14 of the Appeal Brief, based on the legality of obviousness, are therefore not found to be relevant because an obviousness combination has not been made, and therefore no rebuttal is deemed necessary.

#### Claims 8 and 9

Regarding claim 8, Examiner notes it is clear the axially-protruding projections (8a) are of unitary construction with the radial flange as best seen in figure 3.

Regarding claim 9, Appellant's arguments are drawn to the Examiner's interpretation of what a flat surface is. Examiner asserts the cross-sectional view of the flange, in Bradshaw figures 3-4 shows a flat surface. A line is a surface, because it is comprised of matter. In geometry, a line is an imaginary concept; in this case, the flat surface of the downturned axial projection is comprised of a line of matter - - possibly a string of plastic molecules - - which have a measurable width, length, and are flat.

#### B. (Second Grounds)

##### Claims 2, 3, 4 and 5

Art Unit: 3781

Regarding claims 2-3, Appellant argues the Examiner has made up motivation to modify Bradshaw to modify the number of downturned axial flanges. Examiner notes Bradshaw, column 2, lines 47-51 teaches "engaging ones hand with the scalloped portions and screwing the plug down into the flange." The rejection of the claims is based on the obviousness in duplicating the working parts of the invention. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The decision notes, "Combination cannot be patented unless it is synergistic, that is, results in effect greater than sum of several effects taken separately." In the instant case, adding a sixth scallop to Bradshaw will not synergistically increase the benefit afforded by the scallops. In other words, adding a sixth flange to Bradshaw, as is the case in the instant invention, will not provide an increased torque-generating benefit greater than the sum afforded by each scallop. To further summarize, it is the Examiner's position the instant invention as claimed does not differ from Bradshaw in any form beyond having added an extra flange. Although the downturned axial flanges of the instant invention have a different purpose than those of Bradshaw, Examiner asserts that because the claim is drawn to a plug for use with a drum end, the motivation to modify Bradshaw is based on the teachings of Bradshaw, i.e. adding a sixth flange to enhance the gripability of the plug, and not based on the Appellant's disclosures. Appellant's arguments that the rejection is the "poster child" of hindsight reasoning is also improper. The courts have ruled that duplication of the working parts of the invention involves routine skill in the art. Lastly, regarding the "modified hex shape," Examiner notes that a sixth downturned flange would create the modified hexagonal shape as claimed by the Appellant.

Regarding claim 4, Examiner notes it is clear the axially-protruding projections (8a) are of unitary construction with the radial flange as best seen in figure 3.

Regarding claim 5, Examiner notes the arguments for this claim are identical to those already presented above with regard to claim 9.

**C. (Third Grounds)****Claim 13**

Regarding claim 13, Appellant's challenge that Baughman, by not teaching a flange for insertion into the drum, is a critical omission is not relevant. Examiner asserts the claim appears to be a product-by-process claim. Whether inserted into the drum end through an in-situ deformation process, as appears to be the case of the instant invention, or integrally molding the flange with the drum end, the final product in either situation comprises a threaded flange connected to a drum end. It has been held that method limitations in a product claim do not serve to patentably distinguish the claimed product from the prior art. See *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). Thus, even though a product-by-process claim is limited and defined by a process, determination of patentability is based on the product itself. Accordingly, if the product in a product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. *Thorpe*, 777 F.2d at 697, 227 USPQ at 966; *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983).

**D. (Fourth Grounds)****Claims 13, 15, 16, and 17**

Regarding claims 13, 15 and 16, Examiner notes the claim is once again drawn to "a drum closure for a drum end." The threaded advancement of the plug is claimed to be limited by an abutment between the axial projections and the drum end. Therefore, the combination of the prior art must only be capable of being used in the intended manner to properly reject the claim, as noted above in arguments made regarding the propriety of the rejection of claim 1, because of the functional relationship between the positively claimed plug and the intended-use claimed drum end. Examiner notes Baughman, although not used in the rejection, can be summoned as evidence that the closure plug of Bradshaw can be used in the intended manner, because it also teaches a downturned axial flange acting as stop for threaded advancement. Examiner notes the rejection is based on the obviousness of using one plug in place of another, with a strong expectation of success, and furthermore that the plug of Bradshaw is capable of being used in the intended manner. Examiner notes the neck flange comprising elements (16)



Art Unit: 3781

and (17) extends downwardly and conically away from the neck. However, the Zeigler flange (46) and (24) extends horizontally outward, and thus is not as axially removed from the bottom of the axially-extending projections of Bradshaw. Therefore, Examiner asserts the plug of Bradshaw could be used in the intended manner if applied to the drum of Zeigler. At the very least, as noted above regarding claim 1, the plug could be used on the neck of Baughman and would function in the intended manner, that being the threaded advancement of the plug would be stopped by contacting the drum end while compressing a gasket.

In summary, Examiner notes that Appellant has claimed a plug for use with a drum end, and that by claiming a functional relationship between the plug and the drum end, a proper rejection of the claims must only teach the structural features of the plug and be capable of performing in the intended manner. As such Examiner has shown Bradshaw teaches the claimed plug structure, and that the plug of Bradshaw can be used in the intended manner if applied to an appropriately dimensioned drum end. It is the Examiner's position that applying the closure plug of Bradshaw to the drum end of Baughman or Zeigler is necessary in order to prove the plug is capable of being used in the intended manner. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 17, Examiner notes the arguments for this claim are identical to those already presented above with regard to claim 9.

Art Unit: 3781

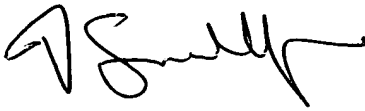
**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

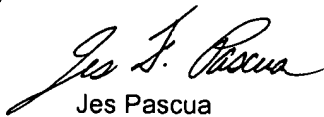
James Smalley



Conferees:



Nathan Newhouse



Jes Pascua